

Pharmacy NewsCapsule

Division of Supportive Living (DSL)/Bureau of Quality Assurance (BQA)

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Medication Administration Review

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A recently released Medmarx™ data report indicates most medication errors reported to that database were administration errors (see medication error article for additional information). One task surveyors evaluate is the medication use process, specifically the evaluation of medication administration. As surveyors complete this task it is important to keep in mind the processes that should occur for proper medication preparation and administration. The following is a summary of those processes:

- ❑ The medication administration record is verified with the medication selected.
- ❑ Proper hand washing technique is used prior to administering medications.
- ❑ Sanitary techniques are used when handling medications.
- ❑ The medication is appropriately prepared. Medications are mixed, shaken, diluted, crushed and dissolved in appropriate situations under appropriate conditions.
- ❑ The resident or patient is appropriately identified.
- ❑ Appropriate vital signs or assessments are taken prior to administering a medication.
- ❑ Accurate medication administration occurs following the "five rights" (right drug, right patient, right dose, right form, right time).
- ❑ Accurate technique is utilized in administering the medication (eye drops, inhalers, NG medications, injectables).
- ❑ Resident/patient privacy is respected during the administration process.

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Venous Leg Ulcers

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Typically, leg ulcers are treated with compression bandages. However, for leg ulcers that are large or hard to heal Trental® (pentoxifylline) may be added to the treatment plan.

Research has shown that Trental® has the ability to improve blood flow and inhibit inflammation. Research studies have used Trental® at doses of 400-800 mg three times a day for up to 24 weeks. Some research studies are using Pletal® (cilostazol) in cases where the individual cannot take Trental®. (Lancet 2002; 359)

As surveyors, you may see pharmacists and physicians looking at using medications for nontraditional purposes when traditional treatments are not working. Providers should be weighing the risk versus the benefit and monitoring the effectiveness and risks of the interventions.

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Efforts are made to assure the accuracy of the information contained in this newsletter but accuracy cannot be guaranteed. The content in this newsletter is intended to be used as an informational tool by the State of Wisconsin Department of Health and Family Services Bureau of Quality Assurance Survey Staff and is not intended as a directive to providers regarding care for patients or residents. Please report any errors or comments to engleda@dhfs.state.wi.us.

New Drugs

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Brand Name	Generic Name	Use
Alinia	Nitazoxanide	Oral antibiotic suspension for children
Strattera	Atomoxetine	Capsule for attention deficit hyperactivity disorder
Forteo	Teriparatide	Injection for osteoporosis

Med Error Corner

Doug Englebert Pharmacy Practice Consultant

In December 2002 the United States Pharmacopeia released the Medmarx™ 2001 Data Report. Medmarx™ is a voluntary internet based medication error reporting database utilized by many hospitals.

The report identified incorrect administration technique as the most common medication error. The majority of medication errors do not result in patient harm. In fact, only 2.4 percent of all medication errors resulted in harm. This 2.4 percent however does represent 2539 harmful errors, of which 353 resulted in longer hospital stays, 70 required intervention to sustain life and 14 resulted in death. The top five medications involved in harmful errors were insulin, morphine, heparin, warfarin, and potassium chloride. These five medications are all “high alert” medications.

Many initiatives by health care facilities attempt to address “high-alert” medications. Initiatives may include triple checking orders and medication preparation; utilizing multiple people in the checking process; limiting access to the medication, i.e., eliminating them from floor stock; staff education and competency verification; and various other interventions.

As surveyors, keep in mind that most medication errors occur as part of the medication administration process. Also keep in mind the high alert medications and expect facilities to address safety concerns regarding these medications.

Focus Drug of the Month

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Abilify®; aripiprazole

Abilify® is approved for the treatment of schizophrenia. The effectiveness of Abilify® for this treatment was established in short-term studies. Long term effectiveness of Abilify® for schizophrenia has not yet been established.

It is not yet known how Abilify® actually works, but it does affect both dopamine and serotonin. Abilify® has been considered a dopamine stabilizer, which makes it unique from all other antipsychotics.

The typical dose of Abilify® is 10-15 mg once a day administered as a single dose. Doses above 15 mg did not show greater effectiveness. Dosage increases should not be made any sooner than every two weeks. Some side effects of this medication include headache, nausea, vomiting, constipation, lightheadedness, somnolence and blurred vision.

This medication is broken down in the body by the liver. As a result, if other medications are also taken that are broken down in the body by the liver, there will be impact on how Abilify® works and potential impact on side effects. For example, if Abilify® were given with Prozac® or Paxil®, the prescribing guidelines indicate to take ½ of the normal dose of Abilify®. On the

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- ❑ The resident/patient is observed while taking medications.
- ❑ Appropriate charting is performed.
- ❑ As needed (p.r.n.) medications are administered appropriately including documented purposes and response charted.
- ❑ Security of medication cart is maintained during medication administration.

As surveyors, you should keep these processes and the types of medication administration errors in mind. The types of medication administration errors include:

- ❑ Medication omitted.
- ❑ Unauthorized medication (no order).
- ❑ Extra dose.
- ❑ Wrong dose.
- ❑ Wrong route.
- ❑ Wrong rate.
- ❑ Wrong dosage form.
- ❑ Wrong time.
- ❑ Wrong technique.

As surveyors, you will observe medication errors. It is critical to record observations and verify them with interviews of facility staff, residents and family members. Citations of medication errors should identify the specific error that occurred, e.g. if wrong dose is given, the citation should indicate what specifically happened. This will help the facility identify medication administration system breakdowns and therefore address the system problems that are creating the medication administration errors.

Thank You!

I would like to start the new year by thanking all of you for your comments, suggestions and ideas for the newsletter. Your contributions to this newsletter helped win a Best Practice Award that all of you should be proud of!

I hope that you as surveyors feel the newsletter is your voice, your opportunity to share and your opportunity to learn and create consistency with your peers around the State of Wisconsin. As always, I will continue to welcome your ideas to make the newsletter a better tool for you. To address some of your comments, one goal this year is to develop an index of topics that have been addressed by the newsletter. If there are other suggestions please let me know.

other hand, if Abilify® is taken with a medication like Tegretol® (carbamazepine), then the dose guidelines indicate Abilify® should be doubled. Pharmacists and physicians should be aware of these drug interactions and make appropriate dose adjustments.

As with all antipsychotics, Abilify® carries warnings about neuroleptic malignant syndrome and tardive dyskinesia. These are precautionary statements, as very little is known about the side effects of the medication due to limited studies. Since Abilify® is now used in the general population, more and more information about dosing, side effects, efficacy, etc. will become known.

Initially this medication will be used mainly for schizophrenia. But, as with all antipsychotics, it may eventually be used for other psychiatric disorders, including dementia. As more information is learned about this medication's uses, updated articles will be shared in this newsletter. Until then, surveyors should check to make sure that when the medication is used, facility staff have reviewed the risks and benefits of its use. In most cases the benefits of the medication should outweigh the risks.

If there are medications you would like featured in this column, please send an email to Doug at engleda@dhfs.state.wi.us

This section will appear in each issue and will contain information that will answer your questions. If there is a topic about which you want more detailed information, please drop me an email at engleda@dhfs.state.wi.us and I'll research the topic.

1. *Do you have to do Tardive Dyskinesia (TD) screening for Reglan® in a nursing home?*

Typically, Tardive Dyskinesia is a devastating and often irreversible side effect of antipsychotic medications. The risk of this side effect increases the longer the offending medication is used. Currently there are no nursing home regulations that specifically require TD screening to be done for any specific medication or for any specific frequency. The regulations do require adequate monitoring for all medications. Those medications that have a risk for TD should be monitored for TD in appropriate situations.

Use of Reglan® (metoclopramide) does include a risk for TD. Reglan® is commonly used in the short-term for nausea and vomiting. Reglan® is also commonly used long-term for reflux disease. If Reglan® is used long-term, it makes sense that the patient may be at risk of developing TD. Therefore, TD screens should be completed. When Reglan® is used short-term, 1-3 weeks for nausea and vomiting, the risk of TD is minimal. In these situations it does not make sense to perform a TD screen. When evaluating a facility medication monitoring practice you must always evaluate the monitoring in context of the medications used and the patient situation.

2. *The physician order states to hold digoxin for an apical pulse of 60. If the nurse administered digoxin without taking an apical pulse, is that considered a medication error?*

Very often a physician will indicate various parameters in their medication orders. One parameter may be to hold a medication for a low apical pulse or low blood pressure. In some cases that parameter and subsequently the blood pressure or apical pulse, must be followed and taken each day. In other cases the parameter is followed only when the measure is taken. As surveyors, you need to make sure that the intent is that those readings are taken each day. Often facilities will have physician-approved procedures where an apical pulse is only taken once a week. In this case, not taking the apical pulse on that one day would not be a medication error, if the policy were to take it once a week or if the physician had clarified some other frequency. A parameter in a physician order does not automatically mean it is implemented each time.

3. *Do metolazone and furosemide need to be administered at different times?*

Metolazone and furosemide are often used together when there is minimal response to furosemide. Because metolazone and furosemide work differently, giving one of the medications prior to the other may have some benefits. However, most medication guidance books do not indicate one be given prior to the other. As surveyors you should only expect to see a process of one medication being given prior to another if the physician ordered it to be administered that way, or if manufacturer's guidelines specifically indicated that process.

4. *How are herbal medications coded on the MDS?*

In December 2002, CMS released a revised RAI User Manual containing the Question and Answer clarifications under Section O guidelines. These guidelines specifically indicate that herbals are not counted in the total of a number of medications.

References are available upon request.